

Claims:

1. A method for identifying a compound capable of modulating the action of the DLG5 protein which method comprises subjecting one or more test compounds to a screen  
5 comprising a polypeptide containing the amino acid sequence shown in SEQ ID NO: 2, or a homologue thereof or a fragment of either.
2. A method for identifying potential anti-IBD therapeutic compounds comprising contacting an assay system capable of detecting the effect of a test compound against  
10 expression level of DLG5, with a test compound and assessing the change in expression level of DLG5.
3. A method of screening for a compound potentially useful for treatment of IBD, which comprises assaying the compound for its ability to modulate the activity or amount of DLG5.  
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4. The method according to claim 3, which involves a method selected from:  
(i) measurement of DLG5 activity using a cell line which expresses the DLG5 polypeptide or using purified DLG5 polypeptide; and  
(ii) measurement of dlg5 transcription or translation in a cell line expressing the DLG5  
20 polypeptide.
5. A cell comprising a reporter gene under the control of the dlg5 promoter.
6. A method of testing potential therapeutic agents for the ability to suppress IBD  
25 phenotype comprising contacting a test compound with a cell engineered to express the DLG5 polypeptide; and determining whether said test compound modulates expression of the DLG5 polypeptide.
7. A method for identifying inhibitors of transcription of dlg5, which method comprises  
30 contacting a potential therapeutic agent with a cell or cell line as described above and determining inhibition of dlg5 transcription by the potential therapeutic agent by reference to a lack of or reduction in expression of the reporter gene.

8. A method of preparing a pharmaceutical composition comprising:
- i) identifying a compound as useful for treatment of IBD according to a screening method as described herein; and
  - ii) mixing the compound or a pharmaceutically acceptable salt thereof with a pharmaceutically acceptable excipient or diluent.
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9. Use of a compound able to modulate the activity or amount of DLG5 in the preparation of a medicament for the treatment of IBD.
- 10 10. A method for the diagnosis of IBD or determining susceptibility to develop IBD, which method comprises:
- (i) obtaining a protein or nucleic acid containing sample from an individual;
  - (ii) detecting the presence or absence of a variant DLG5 on the basis of the presence of a polymorphic amino acid within the DLG5 protein, or a polymorphic base within the dlG5 gene sequence; and,
  - 15 (iii) determining the status of the human by reference to the presence or absence of a polymorphism in DLG5.